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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,595	05/19/2000	Michael Bundy	T30418US	7510

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EXAMINER

SUBRAMANIAN, NARAYANSWAMY

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/574,595

**Applicant(s)**

BUNDY, MICHAEL

**Examiner**

Narayanswamy Subramanian

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 17-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. This is in response to communication dated January 8, 2004. New claims 17-24 have been entered and claims 1-8 and 17-24 are currently pending in the application. The rejections and response to arguments are stated below.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-7, 17, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US Patent 5,864,827) in view of Cuomo et al (US Patent 6,272,539 B1).

With respect to claims 1 and 17, Wilson teaches a method implemented in a broker-dealer computer system, the system being engaged in automated processing of orders for securities including sending messages to markets and receiving from markets responses to messages, the method comprising the steps of recording for messages sent to markets the identity of the market to which each message is sent, the messages comprising orders and displaying the identity of the market (See Wilson Figure 3, Column 5 lines 19-25, Column 6 lines 22-30 and lines 44-55); and wherein said messages are sent to different ones of said markets (See Wilson Column 3 lines 8-12).

Wilson does not explicitly teach the steps of recording the time when each message is sent, recording for responses received from recipient of the first message the time when each

response is received, wherein each response corresponds to a particular message, calculating for at least one recipient a latency dependent upon at least one recorded time when at least one message is sent to the recipient and at least one recorded time when a corresponding response is received from the recipient and displaying the latency for the recipient.

Cuomo teaches the steps of recording the time when each message is sent, recording for responses received from recipient of the first message the time when each response is received, wherein each response corresponds to a particular message, calculating for at least one recipient a latency dependent upon at least one recorded time when at least one message is sent to the recipient and at least one recorded time when a corresponding response is received from the recipient and displaying the latency for the recipient. (See Cuomo abstract, Column 3 lines 11-16, 28-35, Column 3 line 44 – Column 4 line 21, Claims 1-3)

It would have been obvious to one with ordinary skill in the art at the time of the current invention to include the teaching of Cuomo to the invention of Wilson. The combination of the disclosures taken as a whole suggests users would have benefited from having information about network delays so that they may make informed decisions about further course of action.

With reference to claims 3-7, 20 and 22, Cuomo teaches a method claim 1, wherein the latency comprises an instant latency calculated dependent upon one recorded time when one message is sent to a market and one recorded time when a corresponding response is received from the market (See Cuomo Claim 3); wherein the latency comprises an average latency based upon at least one recorded time when at least one message is sent to the market and at least one recorded time when a corresponding response is received from the market, wherein all the recorded times used in calculating the latency are recorded during a defined period of time (See

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Cuomo Column 4 lines 16-20) wherein the number of recorded times used to calculate the average latency is limited to a defined maximum (inherent in the disclosure) and wherein the calculating uses the latest recorded time when a message is sent to the market and the latest recorded time when a corresponding response is received from the market, and wherein the number of recorded times used to calculate the average latency is limited to a defined maximum (inherent in the disclosure); further comprising the steps of counting the number of messages sent to at least one market during a period of time, including storing in computer memory the number of messages sent to the market during the period of time, counting the number of responses received from the market during the period of time, including storing in computer memory the number of responses received from the market during the period of time and displaying the latency for the market, the number of messages sent to the market and the number of responses received from the market during the period of time (See Figures 6A-6C, Column 13 lines 22-42); step of displaying being to a customer who originates at least one of said messages and selects one of servers after said step of displaying (See Cuomo Column 14 lines 43-50); and average latency dependent upon at least two recorded times when at least two messages are sent to at least two markets and at least two recorded times when corresponding responses are received from the market (See Cuomo Column 10 lines 39-46). It would have been obvious to one with ordinary skill in the art at the time of the current invention to include the teaching of Cuomo to the invention of Wilson. The combination of the disclosures taken as a whole suggests users would have benefited from having information about network delays so that they may make informed decisions about further course of action.

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4. Claims 2, 8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US Patent 5,864,827) in view of Cuomo et al (US Patent 6,272,539 B1) and further in view of Grochowski et al (US Patent 6,035,389).

With reference to claims 2, 8 and 23, Wilson and Cuomo combined teach a method of claim 1 as discussed above including absence of responses due to equipment failure (See Cuomo Column 10 lines 57-64).

Wilson and Cuomo combined do not explicitly teach the step of latency for a port.

Grochowski teaches the step of latency for a port (See Grochowski abstract, Column 2 lines 19-25) Equipment failure is interpreted to include failure of ports also.

It would have been obvious to one with ordinary skill in the art at the time of the current invention to include the teaching of Grochowski to the disclosures of Cuomo and Wilson. The combination of the disclosures taken as a whole suggests users would have benefited from having information about port delays so that they may make informed decisions about further course of action.

5. Claims 18, 19, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US Patent 5,864,827) in view of Cuomo et al (US Patent 6,272,539 B1) and further in view of Patterson Jr. et al (US Patent 5,915,245).

With reference to claims 18, 19, 21 and 24, Wilson and Cuomo combined teach a method of claim 1 as discussed above.

Wilson and Cuomo combined do not explicitly teach the steps of selecting one of said markets based on status information; messages further comprising cancellations of orders; and

response indicating that at least one of said orders has been filled or that at least one of said orders has not been filled.

Patterson teaches the steps of selecting one of said markets based on status information (See Patterson Column 9 line 52 – Column 10 line 9, status is interpreted to include latency also); messages further comprising cancellations of orders (See Patterson Column 7 lines 4-7); response indicating that at least one of said orders has been filled or that at least one of said orders has not been filled (See Patterson Column 2 lines 26-28). Partially filled implies that at least one of said orders has not been filled.

It would have been obvious to one with ordinary skill in the art at the time of the current invention to include the teaching of Patterson to the disclosures of Cuomo and Wilson. The combination of the disclosures taken as a whole suggests users would have benefited from having information about the status of their orders and the markets so that they may make informed decisions about how best to route new orders.

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Narayanswamy Subramanian whose telephone number is (703) 305-4878. The examiner can normally be reached Monday-Thursday from 8:30 AM to 7:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached at (703) 308-1065. The fax number for Formal or Official faxes and Draft or Informal faxes to the Patent Office is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

N. Subramanian  
April 2, 2004

Richard Weisberger  
Primary Examiner

**RICHARD WEISBERGER**  
**PRIMARY EXAMINER**